

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on June 5, 2003, and the references cited therewith.

Claims 44, 60, 64, 68, 72, 77, 81, and 83 are amended, no claims are canceled, and no claims are added. As a result, claims 44, 45 and 60-83 are now pending in this application.

Information Disclosure Statement

Applicant submitted an Information Disclosure Statement and a 1449 Form on August 28, 2001. Applicant respectfully requests that initialed copies of the 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

§102 Rejection of the Claims

Claims 44, 60, 62-64, 66-67, 72, 74-75, 77, 79, and 83 were rejected under 35 USC § 102(a) and 102(e) as being anticipated by Vaarstra (U.S. Patent No. 5,924,012). Applicant does not admit that Vaarstra is indeed prior art and reserves the right to swear behind this reference at a later date. Nevertheless the Applicant believes that the present invention is distinguishable from the reference for the following reasons.

The rejection states that, "Vaarstra teaches a contact structure (Fig. 1) including a titanium silicide layer (34) deposited at the bottom of a contact hole and a conformal titanium aluminum nitride layer (36)."

Vaarstra appears to show a metal or metal silicide layer 34 that is deposited and formed at the base of contact. Vaarstra appears to show a barrier layer deposited **separately** over the previously deposited layer 34. However, Vaarstra does not appear to show a titanium silicide contact formed from interaction between the layer and the bottom of the contact hole. Applicant respectfully submits that embodiments of a titanium silicide contact as described in the present specification on page 9, lines 9-14 are structurally different from the layer 34 of Vaarstra as a result of interaction between the layer and the bottom of the contact hole.

As described above, in contrast to Vaarstra, independent claims 44, 60, 64, 72, 77 and 83, as amended, include a titanium silicide contact formed from interaction between the layer and the bottom of the contact hole, or similar embodiments.

§103 Rejection of the Claims

Claims 68, 70-71, and 80-81 were rejected under 35 USC § 103(a) as being unpatentable over Vaarstra (U.S. Patent No. 5,924,012) in view of Honeycutt (U.S. Patent No. 5,644,166).

Applicant respectfully submits that the additional reference of Honeycutt fails to cure the deficiencies of Vaarstra as outlined above.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC § 103(a) rejection is not supported by the references. Reconsideration and withdrawal of the rejection is respectfully requested with respect to Applicant's independent claims 68 and 81. Additionally, reconsideration and withdrawal of the rejection is respectfully requested with respect to the remaining claims that depend from independent claims 68 or 77 as depending on allowable base claims.

Allowable Subject Matter

Claims 45, 61, 65, 69, 73, 78, and 82 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant acknowledges and thanks the Examiner for indication of allowability of claims 45, 61, 65, 69, 73, 78, and 82 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant has not amended claims 45, 61, 65, 69, 73, 78, and 82 to place them in independent form at this time. Pursuant to arguments presented above, Applicant respectfully submits that these claims are now in condition for allowance.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6944) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

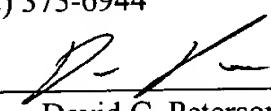
Respectfully submitted,

GURTEJ S. SANDHU ET AL.

By their Representatives,

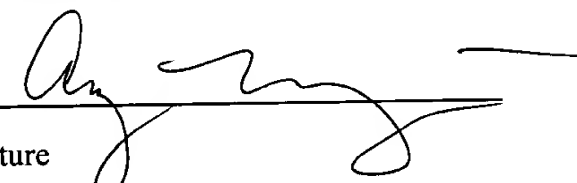
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O.Box 1450, Alexandria, VA 22313-1450, on this 5th day of September, 2003.

Amy Moriarty
Name


Signature